

March 22, 2004

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
TW-A325  
445 Twelfth St., SW  
Washington, DC 20554

Re: *Notice of Ex Parte Presentation in WT Docket No. 03-66*

Dear Ms. Dortch:

On March 18, 2004, Harold Feld, Associate Director, Media Access Project (MAP), Jim Snider, New America Foundation, and Tom DeReggi, President, Rapid DSL & Wireless, met with Robert Pepper, Robert Cannon, and Kenneth Carter, of the Office of Strategic Plans and Policies. Dustin Goodwin, President, New York City Wireless and Marlon Shafer, President, Odessa Office Equipment, participated by telephone.

Mr. Goodwin described NYC Wireless, a non-commercial entity providing Internet access to urban poor in New York City. NYC Wireless works with other non-profit organizations to provide Internet access using 2.4 GHz hotspots and donated services of local ISPs. Mr. Goodwin described his work with a non-profit called Community Access, which provides free MDU housing to former residents of public institutions transitioning to mainstream society. NYC Wireless has provided Internet access for between 30-40 buildings using 2.4 Ghz spectrum. If NYC Wireless did not provide this service, this community would remain unserved.

Because of crowding in urban environments, the equipment used must be very frequency agile and have space to jump around to avoid congestion. Within buildings, use of 2.4 Ghz spectrum allows multiple apartments to be "lit" with a single piece of equipment. More spectrum proximate to 2.4 Ghz is needed to maintain lifeline service to underserved communities in NYC served by NYC Wireless.

Mr. Shaffer described the system maintained by Odessa Office Supplies. Odessa offers unlicensed service in rural areas outside Odessa, Washington. Because signals must travel extended distances, Odessa does not use 5.4 Ghz spectrum, but relies on a mix of 2.4 GHz and 5.8 GHz. The service makes broadband speeds available in places where it would not otherwise be available. The service also provides connectivity for local fire departments, libraries and other important community institutions at reduced rates or free.

Mr. DeReggi described the system deployed by Rapid DSL & Wireless. He explained that they had avoided use of 2.4 Ghz because it lacks sufficient channel space. Additional of even a single channel within .5 Ghz of existing 2.4 underlay would dramatically improve the ability to use 2.4 GHz because channel hopping is a *geometric* progression rather than an arithmetic progression. *i.e.* adding a new channel multiplies the number of possible combinations. Mr. DeReggi compared it to a bicycle lock that has four "slots" with numbers 0-9 on each slot. Adding another slot adds not just one combination, or even ten combinations, but a new order of magnitude of combinations (it increases the total number of combinations from  $10^4$

to 10<sup>5</sup>).

Mr. DeReggi stressed that any additional spectrum must be proximate to existing unlicensed spectrum and operate under sufficiently similar rules so that it is cost effective to build a single unit capable of frequency hopping. Accordingly, it is better to have a single new channel added in 2.5 than 10 new channels added in 10 distant places on the spectrum chart. Mr. Dereggi added that 5.4 and 5.8 bands do not allow sufficient power to connect over significant distances for his needs.

Mr. Dereggi observed that unlicensed is critical to maintaining a competitive market. His company switched from DSL to unlicensed because Verizon continued raised the price of data circuits from less than \$15/circuit to \$75/circuit. Mr. Schaffer confirmed that in his area, DSL was not available, cable systems would not sell access to their customers, and no licensed provider expressed an interest in selling spectrum. Accordingly, unlicensed spectrum was the only solution available.

In accordance with Section 1.1206(b), 47 C.F.R. § 1.1206, this letter is being filed electronically with your office today.

Respectfully submitted

Harold Feld  
Associate Director  
Media Access Project

cc: Robert Pepper  
Robert Cannon  
Kenneth Carter